In the Claims:

1. (Currently amended) A light-emitting semiconductor component comprising a monolithically produced sequence of semiconductor layers (2), wherein an area of n-doped semiconductor layers (3) and an area of p-doped semiconductor layers (4) follow one another and a first pn junction (5a, 5b) is formed between the n-doped areas and p-doped areas (3, 4), wherein the first pn junction (5a, 5b) is subdivided into a light-emitting section (7) and a protective-diode section (8) by an insulating section, (6), characterized in that

wherein the insulating section (6) electrically insulates the light-emitting section (7) and the protective-diode section (8) from one another in the area of the p-doped semiconductor layers (4),

wherein the area of the p-doped semiconductor layers (4) is provided in the protective-diode section (8) on the side facing away from the first pn junction (5b) with an n-doped semiconductor layer (9) which forms a second pn junction (10) with the area of p-doped semiconductor layers (4) in the protective-diode section (8) and is electrically conductively connected to the area of p-doped semiconductor layers (4) in the light-emitting section (7), and

wherein the first pn junction (5a, 5b) has a larger area in the protective-diode section (8) than in the light-emitting section (7).

2. (Currently amended) The light-emitting semiconductor component as claimed in claim 1, characterized in that wherein the area of the first pn junction (5a, 5b) is larger in the protective-diode section (8) than in the light-emitting section (7) by at least a factor of 100.

- 3. (Currently amended) The light-emitting semiconductor component as claimed in claim 1, or 2, characterized in that wherein the sequence of semiconductor layers (2) is applied to a semiconductor substrate (1).
- 4. (Currently amended) The light-emitting semiconductor component as claimed in claim 3, characterized in that <u>further comprising</u> a first contact metallization (11) is applied to a side of the semiconductor substrate (1) facing away from the sequence of semiconductor layers.

 (2) and a second contact metallization (12) is applied to part-areas of a surface of the sequence of semiconductor layers (2) opposite to the semiconductor substrate (1).
- 5. (Currently amended) The light-emitting semiconductor component as claimed in claim 1, wherein one of the preceding claims, characterized in that the area of n-doped semiconductor layers (3) is only partially not interrupted by the insulating section or is not interrupted at all (6) at least in parts.
- 6. (Currently amended) The light-emitting semiconductor component as claimed in claim 3, wherein or as claimed in one of claims 4 or 5, with reference to claim 3, characterized in that the insulating section (6) extends from a surface of the sequence of semiconductor layers (2) opposite to the semiconductor substrate (1) into the area of n-doped layers (3).
- 7. (Currently amended) The light-emitting semiconductor component as claimed in claim 1, wherein one of the preceding claims, characterized in that the light-emitting section (7) is formed by a vertical cavity surface emitting laser (VCSEL).

- 8. (Currently amended) The light-emitting semiconductor component as claimed in claim 7, characterized in that wherein the first pn junction (5a, 5b) is arranged between a first sequence of Bragg reflector layers and a second sequence of Bragg reflector layers, each of which has a multiplicity of layer pairs, and the two sequences of Bragg reflector layers form a laser resonator, one of the two sequences of the Bragg reflector layers being semitransparent for the laser radiation (18) generated in the pn junction (5a).
- 9. (Currently amended) The light-emitting semiconductor component as claimed in claim 8, characterized in that wherein in one of the two sequences of Bragg reflector layers, at least one current aperture (14) is provided for spatially limiting an operating current flowing through the first pn junction (5a) in the light-emitting section (7) during the operation of the vertical cavity surface emitting laser.
- 10. (Currently amended) The light-emitting semiconductor component as claimed in claim 4, wherein or as claimed in one of claims 5 to 9, with reference to claim 4, characterized in that the second contact metallization (12) partially covers the surface of the light-emitting section in such a manner that an uncovered area remains as light exit opening (17).
- 11. (Currently amended) The light-emitting semiconductor component as claimed in claim 1, wherein one of the preceding claims, characterized in that the insulating section (6) is constructed as trench (19).

- 12. (Currently amended) The light-emitting semiconductor component as claimed in claim 11, eharacterized-in that wherein the light-emitting section (7) and the protective-diode section (8) have a mesa-shaped structure on the side of the trench (19).
- 13. (Currently amended) The light-emitting semiconductor component as claimed in claim 11, wherein or 12, characterized in that the trench (19) is bounded by areas which are provided with an insulating layer (16).
- 14. (Currently amended) The light-emitting semiconductor component as claimed in claim 13, characterized in that wherein the trench (19) is filled with a material from which the second contact metallization (12) is formed.
- 15. (Currently amended) The light-emitting semiconductor component as claimed in claim 1, wherein one of claims 1 to 10, characterized in that the insulating section (6) is formed by an implantation, diffusion or oxidation process.
- 16. (Currently amended) The light-emitting semiconductor component as claimed in claim 1, wherein one of the preceding claims, characterized in that n doping and p doping of the semiconductor layers are exchanged for one another.

17. (New) A light-emitting semiconductor component comprising a monolithically produced sequence of semiconductor layers, wherein an area of n-doped semiconductor layers and an area of p-doped semiconductor layers follow one another and a first pn junction is formed between the areas, wherein the first pn junction is subdivided into a light-emitting section and a protective-diode section by an insulating section,

wherein the insulating section electrically insulates the light-emitting section and the protective-diode section from one another in the area of the p-doped semiconductor layers,

wherein the area of the p-doped semiconductor layers is provided in the protective-diode section on the side facing away from the first pn junction with an n-doped semiconductor layer which forms a second pn junction with the area of p-doped semiconductor layers in the protective-diode section and is electrically conductively connected to the area of p-doped semiconductor layers in the light-emitting section, and

wherein the first pn junction in the area of the protective-diode section is short circuited.

18. (New) The light-emitting semiconductor component as claimed in claim 17, wherein an electrically conductive layer is applied to a side edge of the sequence of semiconductor layers facing the protective-diode section and electrically connects the area of n-doped semiconductor layers and the area of p-doped semiconductor layers with one another.